

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 August 2005 (25.08.2005)

PCT

(10) International Publication Number
WO 2005/078989 A1

(51) International Patent Classification⁷: **H04L 9/00**,
H04N 7/26, G06T 9/00

(21) International Application Number:
PCT/SG2005/000037

(22) International Filing Date: 14 February 2005 (14.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1012/CHE/2003 15 February 2004 (15.02.2004) IN
335/CHE/2004 15 April 2004 (15.04.2004) IN
338/CHE/2004 15 April 2004 (15.04.2004) IN
337/CHE/2004 15 April 2004 (15.04.2004) IN
339/CHE/2004 15 April 2004 (15.04.2004) IN
336/CHE/2004 15 June 2004 (15.06.2004) IN

(71) Applicant (for all designated States except US): **MA-
TRIXVIEW LIMITED** [SG/SG]; 9 Shenton Way,
#05-02, Singapore 068813 (SG).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **THIAGARAJAN,
Arvind** [IN/IN]; H24/6, Vaigai Street, Besant Nagar,
Chennai, Tamil Nadu 600090 (IN).

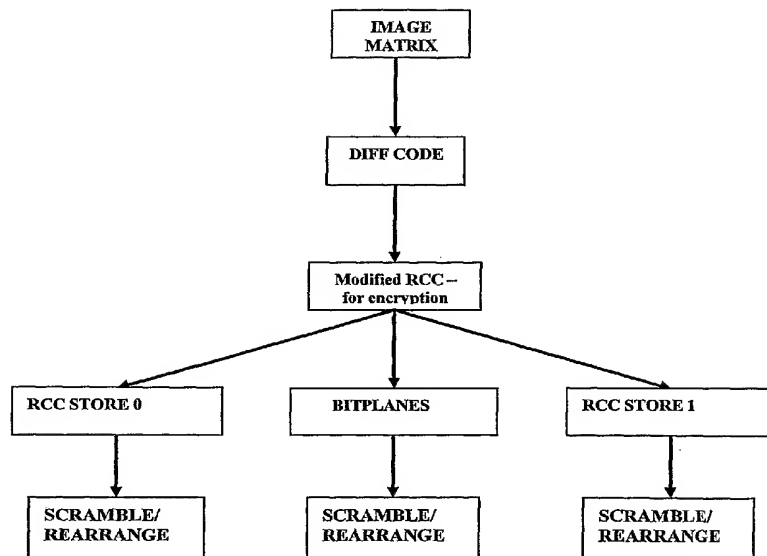
(74) Agent: **ALBAN TAY MAHTANI & DE SILVA**; 39
Robinson Road, #07-01, Robinson Point, Singapore
068911 (SG).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): **ARIPO** (BW, GH,

[Continued on next page]

(54) Title: REPETITION CODED COMPRESSION FOR ENCRYPTING HIGHLY CORRELATED DATA



(57) Abstract: A method for an encryption of highly correlated data using a repetition coded compression is disclosed. The method includes the steps of receiving digital data, reshaping the digital data into a digital data matrix, encoding the repetitions of elements in the digital data matrix into a bit-plane index to form a compressed data, adding an encryption layer to mathematically manipulate the compressed data, and storing the compressed data in a storage memory in an encrypted form.

Flow Diagram for RCC and Encryption Method 1

WO 2005/078989 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.